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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,363	04/25/2001	Ahmad Ansari	7780/13 (T00341)	6562

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EXAMINER	
RAMAN, USHA	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/842,363	ANSARI ET AL.	
	Examiner	Art Unit	
	Usha Raman	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 April 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *20020814*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 6-8, 10, 11, 15-17, 21, and 23-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Radford et al. (US Pre Grant Pub. 2002/0144276).

Regarding claims 1, 11, and 21, Radford teaches a system for transporting video to subscriber premises (see page 1, [0007]) comprising a video repository ("hosting servers"), where videos are decomposed (as content files) based on a predetermined compression algorithm (plurality of content files are encoded at plurality of quality levels, stored independently at the hosting servers. See pages 1-2, [0008], [0009]). The system further comprises subscriber means for caching a content clip (see page 4, [0029]), and an interface for permitting the user to make a selection of a video of a different quality level of a buffered clip (see page 4, [0031]), where the selection generates a request to the video repository for downloading a higher quality clip corresponding to the selected video (pages 1-2, [0009], [0011], [0017]-[0019], and page 3, [0021]) and combining it (combined at playback using a "time

pointer", wherein the playback is seamlessly switched from the lower quality video to the higher quality video, see page 1, [0009]) with the lower quality parts buffered by the subscriber unit.

Regarding claim 2, Radford discloses that streamed content includes video content. See page 2, [0017].

Regarding claim 3, Radford discloses compressing the content. See page 3, [0024].

Regarding claim 6, 15, Radford discloses a method for delivering streaming data. Furthermore, in response to a user request for change in quality (such as request for increasing quality), a higher quality video is streamed. See page 4, [0031]. Therefore the clips are downloaded in real time.

Regarding claims 7, 16, Radford discloses videos for a plurality of different service qualities available. See page 3, [0025].

Regarding claims 8, 17, 23 and 24, Radford teaches the method for determining the download bandwidth and for selecting the quality of the video according to the download bandwidth. See page 3, [0024]-[0025], and page 5, claim 22.

Regarding claim 10, Radford discloses combining the content clips (combined at playback using a "time pointer", wherein the playback is seamlessly switched from the lower quality video to the higher quality video, see page 2, [0009]) with the lower quality parts buffered by the subscriber unit. Radford

therefore teaches the step of "recomposing" the plurality of downloaded portions for presenting the content to the user.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 4, 12-13, and 18-19, rejected under 35 U.S.C. 103(a) as being unpatentable over by Radford et al. (US Pre Grant Pub. 2002/0144276).

Regarding claims 4, and 13, Radford is silent as to the type of compression algorithm used.

Examiner takes official notice that it is well known to compress videos using standard compression algorithms developed by MPEG, that use transform based compression algorithms.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use an MPEG based compression algorithm, in order to compress the video according to a well-known compression standard.

Regarding claim 12, Radford's system comprises transmission of video over the Internet. Radford is silent regarding the use of ADSL as means for connecting the user terminal to the network.

Examiner takes official notice that ADSL was a well known at the time of the invention, used to connect client computers to networks such as the Internet.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Radford by allowing the client terminal to communicate with the video repository using a ADSL communication line. The motivation is to use a transmission mode, deployed over existing infrastructure (i.e. telephone lines), that allows for a higher downstream bandwidth.

Regarding claim 18, see claims 1, 11 and 12. In further regard to claim 18, Radford discloses that client devices are any devices capable of recording or displaying streamed digital data (such as mobile telephones, personal digital assistants (PDAs), computers, display terminals, digital televisions, and the like. See page 2, [0016]). Examiner further notes that a set top box is a computer device with capabilities of receiving and playback of video and/or multimedia data. Therefore, the client device in Radford's system also comprises set top box. Furthermore, streaming media requires buffering at the client device that requires a memory for locally storing portion of the compressed content files.

Regarding claim 19, Radford discloses encoding the files for variety of decoder formats. The client system therefore has a decoder for decompressing the recombined compressed content file. See page 4, [0028].

5. Claims 5, 14, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Radford et al. (US Pre Grant Pub. 2002/0144276) as applied to claims 1, 11 and 18 above, and further in view of DeBey (US Pat. 5,701,582).

Regarding claims 5, 14, and 20, Radford does not disclose downloading the first content clip of the lower quality level during off peak hours.

DeBey discloses pre-caching a first segment of plurality of movies at the user terminal, wherein upon receiving a user selection of a clip, the first segment is played from the user terminal and the remainder of the clips are downloaded subsequently. By pre-caching the first segments of the movies, the download bandwidth is reduced, as well as the playback latency is minimized due to the availability of the clip at the time of request. Furthermore, the first segments are downloaded at a predetermined time, and can be done during off-peak hours in order to minimize bandwidth. See column 11, lines 50-64.

It would have been obvious to modify the system of Radford with teachings of DeBey by downloading the first segment during off peak hours, in order to minimize the download bandwidth and playback latency at the time of request.

6. Claims 9 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Radford et al. (US Pre Grant Pub. 2002/0144276) as applied to claims 7 and 21 above, and further in view of Hassan et al. (US Pat. 5,940,117)

Regarding claim 9, 22 Radford does not disclose organizing portions in a pyramidal scheme.

Hassan teaches the step of first transmitting a base image (the lower quality content) and then additional image details to be recombined at the subscriber unit for providing a higher level of resolution to the image. Such a decomposing/recomposing method uses a pyramidal scheme, with incremental

levels of resolution increasing the quality of the image. See abstract, column 1, lines 58-67, column 2, lines 1-35 and column 3, lines 3-9.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Radford with teachings of Hassan by using a pyramidal decomposition scheme, and downloading incremental data according to the instantaneous bandwidth rate. The motivation is to allow downloading of image in an incrementally increasing quality according to network traffic conditions, without manually requesting a change in quality.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Stahl et al. (US Pre Grant Pub. 2002/0078465) provide a discussion of the ADSL for transmission of video data (see abstract, page 1, [0002], .[0003]), Chou (US Pre Grant Pub. 20040049793) discloses a method of providing an initial clip of low quality video upon user request, and subsequently switching to a higher quality video, in order to minimize the playback latency.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usha Raman whose telephone number is (571) 272-7380. The examiner can normally be reached on Mon-Fri: 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on (571) 272-7375. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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03-07-05

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